



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAY - 4 2017

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Philip Comella
Freeborn & Peters LLP
311 South Wacker Drive, Suite 3000
Chicago, Illinois 60606

Re: Administrative Order EPA-5-17-113(a)-MI-04

Dear Mr. Comella:

Enclosed is an executed original of the Administrative Consent Order regarding the above captioned case. If you have any questions about the Order, please contact me at 312-886-3853.

Sincerely,

A handwritten signature in dark ink, appearing to read "Natalie Topinka", is written above the typed name.

Natalie Topinka, Acting Chief
Air Enforcement and Compliance Assurance Section (IL/IN)

Enclosure

cc: Andre Daugavietis/C-14J
Tom Hess, MDEQ
Scott Miller, MDEQ

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

| | | |
|----------------------------|---|------------------------------------|
| In the Matter of: |) | EPA-5-17-113(a)-MI-04 |
| |) | |
| Advanced Disposal Services |) | Proceeding Under Section 113(a)(3) |
| Arbor Hills, Inc. |) | of the Clean Air Act, 42 U.S.C. |
| Northville, Michigan |) | §§ 7413(a)(3) and 7414(a)(1) |
| |) | |
| _____ |) | |

Administrative Consent Order

1. The Director of the Air and Radiation Division, U.S. Environmental Protection Agency (EPA), Region 5, is issuing this Order to Advanced Disposal Services Arbor Hills, Inc. (Advanced Disposal or Respondent) under Sections 113(a)(3) and 114(a)(1) of the Clean Air Act (CAA), 42 U.S.C. §§ 7413(a)(3) and 7414(a)(1).

Statutory and Regulatory Background

New Source Performance Standards

2. Under Section 111 of the CAA, 42 U.S.C. § 7411, EPA promulgated the General Provisions for the Standards of Performance for New Stationary Sources (NSPS General Provisions) at 40 C.F.R. §§ 60.1 through 60.19. The NSPS General Provisions apply to Arbor Hills Landfill (the Landfill) and the associated gas collection and control system (GCCS) because the Landfill is a municipal solid waste (MSW) landfill that commenced modifications on or after May 30, 1991.
3. The NSPS General Provisions, at 40 C.F.R. § 60.11(d), requires that the owner or operator of the Landfill and GCCS shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions at all times, including periods of

startup, shutdown, and malfunction. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPA, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

4. Under Section 111 of the CAA, 42 U.S.C. § 7411, EPA promulgated the Standards of Performance for New Stationary Sources for Municipal Solid Waste Landfills (Landfill NSPS) at 40 C.F.R. §§ 60.750 through 60.759. The Landfill NSPS applies to the Landfill and GCCS.
5. The Landfill NSPS, at 40 C.F.R. § 60.755(c)(5), requires the owner or operator of the Landfill and the GCCS to maintain proper cover integrity at the Landfill to ensure GCCS efficiency.
6. The Landfill NSPS, at 40 C.F.R. § 60.759(b)(1)-(2), requires the owner or operator of the Landfill and GCCS to install an active gas collection system that can withstand overburden, address water in the Landfill, prevent gas into the air, and extend to address gas migration standards.
7. The Landfill NSPS, at 40 C.F.R. § 60.752(b)(2)(ii)(A)(3), requires the owner or operator of the Landfill and GCCS to collect gas at a sufficient extraction rate.
8. The Landfill NSPS, at 40 C.F.R. § 60.755(a)(3) & (5), requires the owner or operator of the Landfill and GCCS to expand the gas collection system to correct the exceedance of any wellhead monitoring parameter within 120 days of the initial measurement of the exceedance, if correction of the exceedance cannot be achieved within 15 calendar days. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

National Emission Standards for Hazardous Air Pollutants

9. Under Section 112 of the CAA, 42 U.S.C. § 7412, EPA promulgated the National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills (Landfill NESHAP) at 40 C.F.R. §§ 63.1930 through 63.1990. The Landfill NESHAP applies to the Landfill and GCCS because the Landfill is an MSW landfill that has accepted waste since November 8, 1987 and is a major source as defined in 40 C.F.R. § 63.2.
10. The Landfill NESHAP, at 40 C.F.R. § 63.1955, requires the owner or operator of the Landfill and the GCCS to comply with the requirements of the Landfill NSPS at 40 C.F.R. Part 60, Subpart WWW.
11. Under Section 112 of the CAA, 42 U.S.C. § 7412, EPA promulgated the General Provisions for the National Emission Standards for Hazardous Air Pollutants (NESHAP General Provisions) at 40 C.F.R. §§ 63.1 through 63.16. The parts of the NESHAP General Provisions that apply to the Landfill are located in Table 1 of the Landfill NESHAP.
12. The NESHAP General Provisions, at 40 C.F.R. § 63.6(e)(1)(i), requires that the owner or operator of the Landfill and the GCCS shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

Michigan's Renewable Operating Permit (ROP) Requirements

13. Under Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), EPA promulgated regulations implementing Title V of the CAA at 40 C.F.R. Part 70. The Michigan Department of Environmental Quality (MDEQ) issued a ROP to the Landfill on January 24, 2011.
14. The ROP requires the owner or operator of the Landfill and the GCCS to comply with the Landfill NSPS and NESHAP as well as timelines on performance testing for control devices.

Clean Air Act Section 114

15. The Administrator of EPA may require any person who is subject to any requirement of the CAA to make reports under Section 114(a)(1) of the CAA, 42 U.S.C. § 7414(a)(1). The Administrator has delegated this authority to the Director of the Air and Radiation Division.

Findings

16. Advanced Disposal owns and operates the Landfill at 10690 West Six Mile Road, Northville, Michigan.
17. BFI Waste Systems of North America, LLC (BFI) retained ownership of the GCCS at the Landfill in a Purchase Agreement dated March 8, 2000; and operated the GCCS, including over 300 gas collection wells, two enclosed flares, and one utility flare. Subsequently, as of February 2, 2017, BFI transferred ownership and control of the GCCS to Advanced Disposal, and as a result is no longer an owner or operator of the affected facility.
18. Arbor Hills Energy owns and operates the Landfill's Gas-to-Energy Plant at 10611 West Five Mile Road, Northville, Michigan.
19. The Landfill was modified on or after May 30, 1991. Advanced Disposal is subject to the Landfill NSPS, the Landfill NESHAP, and the NSPS and NESHAP General Provisions as the owner and operator of the Landfill.
20. Advanced Disposal owns and operates an "emission source" within the meaning of Section 114(a)(1) of the CAA, 42 U.S.C. § 7414(a)(1). Therefore, Advanced Disposal is subject to the requirements of Section 114(a)(1).
21. On September 29, 2016, EPA issued to Advanced Disposal a Finding of Violation (FOV) alleging that it violated the Landfill NSPS at 40 C.F.R. § 60.755(c)(5), the NSPS General

Provisions at 40 C.F.R. § 60.11(d), the Landfill NESHAP at 40 C.F.R. § 63.1955, the NESHAP General Provisions at 40 C.F.R. § 63.6(e)(1)(i), and the facility ROP.

22. In addition, on September 29, 2016, EPA issued a FOV to BFI alleging that it violated the Landfill NSPS at 40 C.F.R. §§ 60.759(b)(1)-(2), 60.755(a)(3) and 60.752(b)(20(ii)(A)(3), the NSPS General Provisions at 40 C.F.R. § 60.11(d), the Landfill NESHAP at 40 C.F.R. § 63.1955, the NESHAP General Provisions at 40 C.F.R. § 63.6(e)(1)(i), and the facility ROP.
23. On November 14, 2016, and subsequently, representatives of Advanced Disposal, BFI, Arbor Hills Energy, MDEQ and EPA discussed the September 29, 2016 FOVs.
24. On December 2, 2016, Advanced Disposal and BFI each submitted additional information regarding the allegations in the FOVs.
25. On December 23, 2016, Advanced Disposal, BFI and Arbor Hills Energy submitted a Collaborative Plan for Corrective Action outlining construction work completed in 2016 and anticipated work for 2017 intended to ensure and demonstrate compliance at the Landfill with the Landfill NSPS, the Landfill NESHAP, the NSPS and NESHAP General Provisions, and the facility ROP.
26. EPA subsequently requested additional information related to that Collaborative Plan for Corrective Action, which the parties provided on February 10, 2017.

Compliance Program

27. Respondent must demonstrate and maintain compliance with the Landfill NSPS, the Landfill NESHAP, the NSPS and NESHAP General Provisions and the facility ROP at the Landfill facility.

28. Respondent has agreed to work to reduce the emission of odors from the Landfill to surrounding communities.
29. Respondent has agreed to the terms of a Compliance Plan. Under Section 114(a)(1) of the CAA, 42 U.S.C. § 7414(a)(1), the Compliance Plan is attached to and made part of this Order.
30. Respondent has agreed to timely implement the steps set forth in the Compliance Plan.
31. Arbor Hills Energy has agreed to perform certain operation and maintenance responsibilities related to this Order on the Landfill's GCCS pursuant to a written agreement with Advanced Disposal.
32. Respondent must send any reports required by this Order, including the Compliance Plan, to:

Attention: Compliance Tracker (AE-18J)
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

General Provisions

33. This Order does not affect Respondent's responsibility to comply with other federal, state and local laws.
34. Respondent neither admits nor denies any finding of fact or law in the FOV or this Order.
35. This Order does not restrict EPA's authority to enforce the CAA and its implementing regulations.
36. The parties may modify the terms of this Order by written agreement signed by EPA and the Respondent. Requested modifications to the Compliance Plan, including deadlines, may be approved in writing by assigned EPA staff.
37. Failure to comply with this Order may subject Respondent to penalties under Section 113 of the CAA, 42 U.S.C. § 7413, and 40 C.F.R. Part 19.

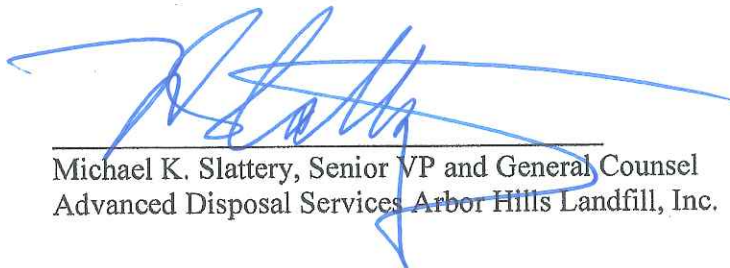
38. The terms of this Order are binding on Respondent and each of its assignees and successors. Respondent must give notice of this Order to any successors in interest prior to transferring ownership of facilities subject to this Order, and must simultaneously verify to EPA, at the above address, that it has given the notice.
39. Respondent may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B, for any portion of the information it submits to EPA. Information subject to a business confidentiality claim is available to the public only to the extent allowed by 40 C.F.R. Part 2, Subpart B. If Respondent fails to assert a business confidentiality claim, EPA may make all submitted information available, without further notice, to any member of the public who requests it. Emission data provided under Section 114 of the CAA, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2, Subpart B. "Emission data" is defined at 40 C.F.R. § 2.301.
40. This order is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks collection of information by an agency from specific individuals or entities as part of an administrative action or investigation. To aid in our electronic recordkeeping efforts, please furnish an electronic copy on physical media such as compact disk, flash drive or other similar item. If it is not possible to submit the information electronically, submit the response to this Order without staples; paper clips and binder clips, however, are acceptable.
41. EPA may use any information submitted under this Order in an administrative, civil judicial or criminal action.
42. Respondent agrees to the terms of this Order. Respondent waives any remedies, claims for relief, and otherwise available rights to judicial or administrative review that it may have

with respect to any issue of fact or law set forth in this Order, including any right of judicial review under Section 307(b) of the CAA, 42 U.S.C. § 7607(b).

43. This Order is effective on the date of signature by the Director of the Air and Radiation Division. This Order will terminate on the earlier of (a) two years from the effective date; or (b) the date that EPA accepts certification by Respondent that it has complied with all terms of the Order and satisfactorily implemented the Compliance Plan.

Advanced Disposal Services Arbor Hills, Inc.


9/19/2017
Date



Michael K. Slattery, Senior VP and General Counsel
Advanced Disposal Services Arbor Hills Landfill, Inc.

United States Environmental Protection Agency

5/4/17
Date


Edward Nam
Director
Air and Radiation Division
U.S. Environmental Protection Agency, Region 5

ARBOR HILLS LANDFILL

Northville, Michigan

COMPLIANCE PLAN

Original: March 23, 2017

Table of Contents

| | |
|---|---|
| 1. Introduction | 1 |
| 2. Goals of the Compliance Plan | 2 |
| 3. Scope of Construction Work | 3 |
| 4. Reporting Requirements | 4 |
| 5. Revisions | 5 |
| Attachment A – Anticipated Construction Work and Deadlines..... | 6 |

1. Introduction

Arbor Hills Landfill (Arbor Hills or the Landfill) is a municipal solid waste landfill located at 10690 West Six Mile Road, Northville, Michigan. The Landfill is subject to the Clean Air Act (CAA) regulations for municipal solid waste landfills at 40 C.F.R. Part 60, Subpart WWW (Landfill NSPS) and 40 C.F.R. Part 63, Subpart AAAA (Landfill NESHAP). The Landfill is currently actively accepting waste and producing and collecting landfill gas (LFG). The Landfill operates an active gas collection system with over 300 vertical gas wells that sends gas to be controlled. The Landfill currently has two methods of controlling the LFG including a landfill gas-to-energy plant (the Plant) with three EGT-Typhoon turbines and one Solar Taurus turbine used to generate electricity and two enclosed flares and one open utility flare. The primary control device at the Landfill is the Plant, but when additional control capacity is necessary, LFG is sent to the flares.

Finding of violations (FOVs) were issued by EPA to each party involved with environmental compliance at the Landfill since 2012 including Advanced Disposal Services (Advanced Disposal), BFI Waste Systems of North America LLC (BFI) and Arbor Hills Energy LLC (Arbor Hills Energy) alleging violations of the Landfill NSPS; Landfill NESHAP; the New Source Performance Standard General Provisions at 40 C.F.R. Part 60, Subpart A (NSPS General Provisions); the National Emission Standards for Hazardous Air Pollutants General Provisions at 40 C.F.R. Part 63, Subpart A (NESHAP General Provisions); and the Landfill's Renewable Operating Permit (ROP). The purpose of this document is to provide a compliance plan for Arbor Hills Landfill and its associated gas collection and control system (GCCS) to address these allegations. This compliance plan was created for inclusion in the Arbor Hills Administrative Consent Order (ACO).

2. Goals of the Compliance Plan

The Compliance Plan identifies Advanced Disposal as the responsible party for operation of the GCCS. The Plan outlines steps that the party agrees to take to aid in reaching compliance with the applicable CAA regulations and address violations alleged in EPA's FOVs but may not resolve all compliance issues at the Landfill. The Plan includes the following:

- construction work that will be performed on the gas collection system to increase extraction efficiency and rate,
- construction work that will be performed on the gas control system to increase control efficiency and capacity,
- studies that will be performed to ensure adequate gas extraction and control of the entire landfill, and
- additional work to ensure landfill gas is collected and controlled.

To complete these tasks, the Compliance Plan:

- identifies construction and maintenance work to be completed,
- identifies studies to be completed,
- identifies monitoring to be completed, and
- identifies deadlines for construction and studies.

3. Scope of Construction Work

As part of the Compliance Order, Advanced agreed to carry out construction activities and make improvements to the GCCS to help alleviate concerns related to EPA's alleged violations and odors in the nearby community. The planned construction can be placed under three categories: gas system and flares, leachate system enhancements and landfill enhancements.

Gas system and flare enhancements include the following:

- addition of a temporary flare and a permanent flare to take its place,
- improvements of the condensate system and main headers,
- installation of caisson wells to withstand overburden in the active areas,
- studies of vacuum, water level and gas migration, and
- odor investigations.

Leachate system enhancements include the following:

- addition of a leachate tank with odor controls and
- addition of carbon filters on existing leachate tanks and lift stations.

Landfill enhancements include the following:

- accelerated installation of final cover and a temporary cap on additional areas of the landfill,
- installation of an odor control system, and
- daily cover inspections.

Additional details on these construction activities and deadlines are presented in Attachment A.

4. Reporting Requirements

Under Section 114(a)(1) of the CAA, 42 U.S.C. § 7414(a)(1), EPA may require the Landfill operator to make reports in order to assess compliance with the CAA. As part of this Compliance Plan, the Landfill operator must maintain and submit records to aid in assessing compliance with the CAA and the progress of this Compliance Plan.

A monthly report must be submitted to EPA by the 10th calendar day of the following month containing the following information to assess progress of the Compliance Plan:

1. Construction work completed and the cost of each project;
2. Construction work in progress and the expected date of completion; and
3. Progress and results of studies performed.

The following information will be submitted to EPA 30 days after the end of each quarter:

1. All monthly gas well monitoring including:
 - a. Temperature
 - b. Pressure
 - c. Gas composition (methane, oxygen, etc)
 - d. Depth to bottom and depth to water measurements (quarterly)
2. Gas control device parameters including:
 - a. Gas flow rate to turbines and flares (scf/day)
 - b. Time that control device was inactive, if applicable
3. List of new and re-drilled gas wells including explanations on why a new well was placed and/or why a re-drill was performed;
4. Methane content of probes on the boundary; and
5. Analysis of gas extraction rate relative to the previous quarter(s).

5. Revisions

Although this plan outlines corrective actions and deadlines related to compliance, the Compliance Plan may need to be revised in the future to reflect appropriate deadlines and to update the scope of work performed to aid in CAA compliance and to address odor issues. The Compliance Plan also may be adjusted based on new information from field investigations.

The following process will be used to revise the Compliance Plan:

1. EPA or Advanced Disposal must notify the parties affected by a proposed revision and provide a redlined document with the proposed revision (draft document) by email to the responsible representatives indicated below;
2. Both parties will review the proposed revision and provide any comments or edits to the changes within 15 calendar days after receiving the draft document;
3. The party that proposed the revision will have 10 days to address concerns and make necessary changes based on the comments and send a copy of the revision to all parties;
4. Revisions become effective when they are approved by EPA and will be implemented into a revised document **within 30 days of the original notification.**

The following are the responsible representatives for each party:

| Party | Name | Title | E-Mail | Phone Number |
|----------------------------|------------------|------------------------------|------------------------------------|--------------|
| US EPA Region 5 | Kenneth Ruffatto | Environmental Engineer | Ruffatto.kenneth@epa.gov | 312-886-7886 |
| Advanced Disposal Services | Jay Warzinski | V.P. Landfill Operations | Jay.warzinski@advanceddisposal.com | 904-309-6696 |
| | Dave Retell | East Region Landfill Manager | Dave.retell@advanceddisposal.com | 248-412-0692 |

If for any reason the responsible representative can no longer assume his/her role, the party will notify all parties and provide the new responsible representative. The Compliance Plan must then be revised to reflect this change.

Attachment A – Anticipated Construction Work and Deadlines

| Item | Gas System and Flares | Permit Application Submittal | To Be Completed By | Comments |
|------|--|------------------------------|---|--|
| 1 | ADS is prepared to install a new 3,000 SCFM temporary candlestick flare at the northwest corner of the landfill once it receives the necessary approvals from the MDEQ. | February 3, 2017 | Installed and operational | |
| 2 | Permitting and installation of new permanent flare capacity and associated piping, as needed | TBD | Permit application by May 15 th . Install 180 Days After Permit Issued | |
| 3 | Replace NW drip leg with condensate sump | NA | July 1, 2017 | |
| 4 | Installation of (aprox 1,800 ft) permanent appropriately sized header pipe along west and north side of Cell 4 and a temporary header (approx 2,500 ft) to be sized along north side of Cell 6 and Arbor Hills East and associated sumps and installation airline and force main | NA | October 1, 2017 | |
| 5 | Install seven (7) Caisson gas extraction wells in Cell 4D prior to NSPS requirement (dependent on waste filling in the new Cell 4D by ADS) | NA | March 24, 2017 | |
| 6 | Summary Report of Vacuum study near the flare (Include action steps taken) | NA | February 28, 2017 | Summary Report from Cornerstone already provided |
| 7 | Complete Vacuum study of the gas collection system | NA | June 1, 2017 | |
| 8 | Study water levels in wells and effective pump installation | NA | June 1, 2017 | |

| | | | | |
|----|--|----|--|---------------|
| 9 | Study on landfill Gas Migration - Meet with MDEQ to discuss options and or need for additional migration studies | NA | April 30, 2017 | ----- |
| 10 | Perimeter Odor Patrols by technicians trained to identify the type of odor detected | NA | Twice per day through 1 st quarter 2017; once per day through 3 rd quarter. Re-assess frequency 4 th quarter. | Ongoing tasks |

| Item | Leachate System Enhancements | | | |
|------|---|----|-----------------------------|--|
| 1 | New 550,000-gallon leachate tank installation. Odor control for new leachate tank will be installed prior to operation in 2017. | NA | Complete | |
| 2 | Odor control for BFI's two existing 50,000-gallon leachate tanks has Carbtrol carbon filters installed. | NA | Completed November 21, 2016 | |
| 3 | Arbor Hills East Leachate lift station has Carbtrol carbon filter installed | NA | Completed November 22, 2016 | |
| 4 | Arbor Hills West Leachate lift station has activated carbon filter installed | NA | April 30, 2017 | |
| 5 | ADS will take the existing 300,000-gallon leachate tank offline. If replaced, carbon filter will be installed on new tank. . | NA | June 1, 2017 | |

| Item | Landfill Enhancements | | | |
|------|--|----|-------------------------------|-------------------------------------|
| 1 | ADS will accelerate installation of 20 acres of final cover along the southern slope | NA | Initiate by December 31, 2017 | |
| 2 | ADS will be installing an odor control system before the end of the year. | NA | Completed. | |
| 3 | ADS will be expanding the temporary cap placed in 2016 by 10 acres | NA | December 31, 2017 | |
| 4 | Daily cover inspections involving pictures and records for evening cover placement and morning cover removal | NA | NA | Ongoing tasks through July 31, 2017 |

CERTIFICATE OF MAILING

I certify that I sent the Administrative Consent Order, EPA-5-17-113(a)-MI-04, by certified mail, return receipt requested, to:

Philip Comella
Freeborn & Peters LLP
311 South Wacker Drive,
Suite 3000
Chicago, Illinois 60606

I also certify that I sent a copy of the Administrative Consent Order, EPA-5-17-113(a)-MI-04, by E-mail to:

Tom Hess
HESST@michigan.gov

and

Scott Miller
MILLERS@michigan.gov

On the 8 day of May 2017.



Kathy Jones
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT
NUMBER:

7016 1370 0001 5719 9988